

REMARKS

In the present application claims 1-11, 13-28, 30-34, 36-46, and 48-57 remain pending. Claims 1, 18, 36 and 56 are independent.

The final Office Action dated June 14, 2007 rejected claims 1-11, 13-16, 18-28, 30-33, 36-46 and 48-51, 53-56 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,643,671 to Milillo et al ("Milillo"), in view of U.S. Patent No. 6,253,295 to Beal et al. ("Beal"). Claims 17, 34 and 52 were rejected under 35 U.S.C. §103(a) as being unpatentable over Milillo in view of Beal and further in view of U.S. Patent No. 5,504,861 to Crockett et al. ("Crockett"). While the Office Action acknowledges that claim 57 is pending, it does not address that claim. Applicant respectfully requests that the Examiner consider that claim and provide its status.

The final Office Action dated June 14, 2007 maintains the same rejection as in the previous Office Action, contending that the "virtual copy" claimed in independent claims is done "by transferring the first bitmap to a second bitmap", and alleging that such copy is disclosed by Milillo in col. 4, lines 47-56. Applicant respectfully disagrees.

As explained in applicant's previous response, those passages of Milillo disclose that its primary target volume receives a copy of the initial data file and a copy of the write command record from the source volume. Thus, Milillo suggests a physical copy from primary source volume to the primary target volume. Physically copying the initial data file is different from "performing a first point in time virtual copy." To further clarify this point, independent claims 1, 18, and 36 being amended to recite, "the first bitmap representing tracks of data in the first volume and the second bitmap representing tracks of data in the second volume and wherein said first point in time virtual copy does not copy physical data." Claim 56 is being amended to recite, "wherein said first point in time virtual copy does not copy physical data". Support for the amendment can be found on page 11 of the originally submitted specification. To clarify, a virtual copy transfers bits in a bit map that represents tracks of data, but the actual data referenced by the bitmap is not physically copied.

For at least this reason, applicant believes the cited references do not disclose or suggest every element claimed in independent claims and their respective dependent claims by virtue of dependencies, and therefore those claims are unobvious over the cited references.

While the above reason suffices to overcome the rejection over Milillo and Beal, it is further proffered that Milillo also fails to disclose or suggest, "destaging modified data to a first volume at the primary site for a current database update." Rather, the cited passages of Milillo suggest that Milillo destages modified data to its primary target volume. With respect to Beal, while Beal discloses enabling pair-pair remote copy, Beal does not disclose or suggest those elements that Milillo lacks. For at least the foregoing reasons, applicant believes that the Office Action has failed to properly advance a prima facie case of obviousness, and therefore, independent claims 1, 18, 36 and 56 and their dependent claims by virtue of dependency are not obvious over Milillo and Beal.

With respect to the rejection of claims 17, 34 and 52 under 35 U.S.C. §103(a) over Milillo in view of Beal and further in view Crockett, because Crockett does not disclose or suggest what Milillo and Beal fail to disclose or suggest as discussed above, those claims are also not obvious for at least the same foregoing reasons.

In view of the foregoing, applicants respectfully requests reconsideration, withdrawal of all rejections, and allowance of all pending claims in due course.

Respectfully submitted,



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